

NOTICE OF STUDY SESSION
Solid Waste Rate Study
CITY HALL, Fifth Floor
6801 Delmar Blvd., University City, Missouri 63130
Monday, July 8, 2024
5:30 p.m.

AGENDA

1. Meeting called to order
2. Solid Waste Rate Study
3. Adjournment

The public may also observe via:

Live Stream via YouTube:

https://www.youtube.com/channel/UCyN1EJ_-Q22918E9EZimWoQ

Posted 5th day of July, 2024.
LaRette Reese
City Clerk, MRCC

Solid Waste Rate Study

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FINDINGS & RECOMMENDATIONS

PRESENTED TO CITY COUNCIL

JULY 08, 2024



Project Tasks

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- Data Request and Review
- Benchmarking Research
- Financial Cornerstones
 - ✦ Direct Operating Expense
 - ✦ Contracted Disposal
 - ✦ CIP
 - ✦ Vehicle Replacement
- Revenue Sufficiency
- Cost Allocation Functions
- Full Cost vs. Current Rates
- Rate Design
- Recommendations

Trash & Recycling System Cost Centers

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Collection Services:

Curbside Trash

Alley Container Trash

Curbside Recycling

Curbside Yard Waste

Bulky Collection

Commercial Container Trash

Commercial Container Recycling

Recycling Drop-off

Facility Operations:

Transfer Station

Recycling Drop-off (at T.S.)

Management & Administration

(Includes cost of billing)

Collection Routes

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Type of Service	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Wks/Yr	Total
Residential Curbside Refuse Carts - ASL	2.00	2.00	2.50	2.00	2.00		52	10.50
Residential Curbside Recycling Carts - ASL	2.00	2.00	2.50	2.00	2.00		52	10.50
Residential Yard Waste - Rearload	1.00	1.00	1.00	1.00	1.00		52	5.00
Bulk Waste - RL & Grapple 3wks in April & September	3.00	3.00	3.00	3.00	3.00		6	1.73
Special Pickup - Bulk for fee			0.25		0.25		46	0.44
Commercial/Multifamily/1-2 Fam Alley Refuse Dumpsters - Sideload "Mechanical"	2.00	2.00	1.00	2.00	2.00		52	9.00
Commercial/Multifamily .Recycling Dumpsters - Sideload "Mechanical"			1.00			0.50	52	1.50
R-O - only special request & drop-off, no "route"	0.25	0.25	0.25	0.25	0.25		52	1.25
Total Weekly Routes	10.25	10.25	11.50	10.25	10.50	0.50		39.92

Challenges Since Last (2018) Study

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- Pandemic
- Flooding in 2022 – loss of trucks
- Transfer Station
 - Compactor **on last leg**
- Recyclables processing fees



Financial Data Overview

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Historical Financial Performance

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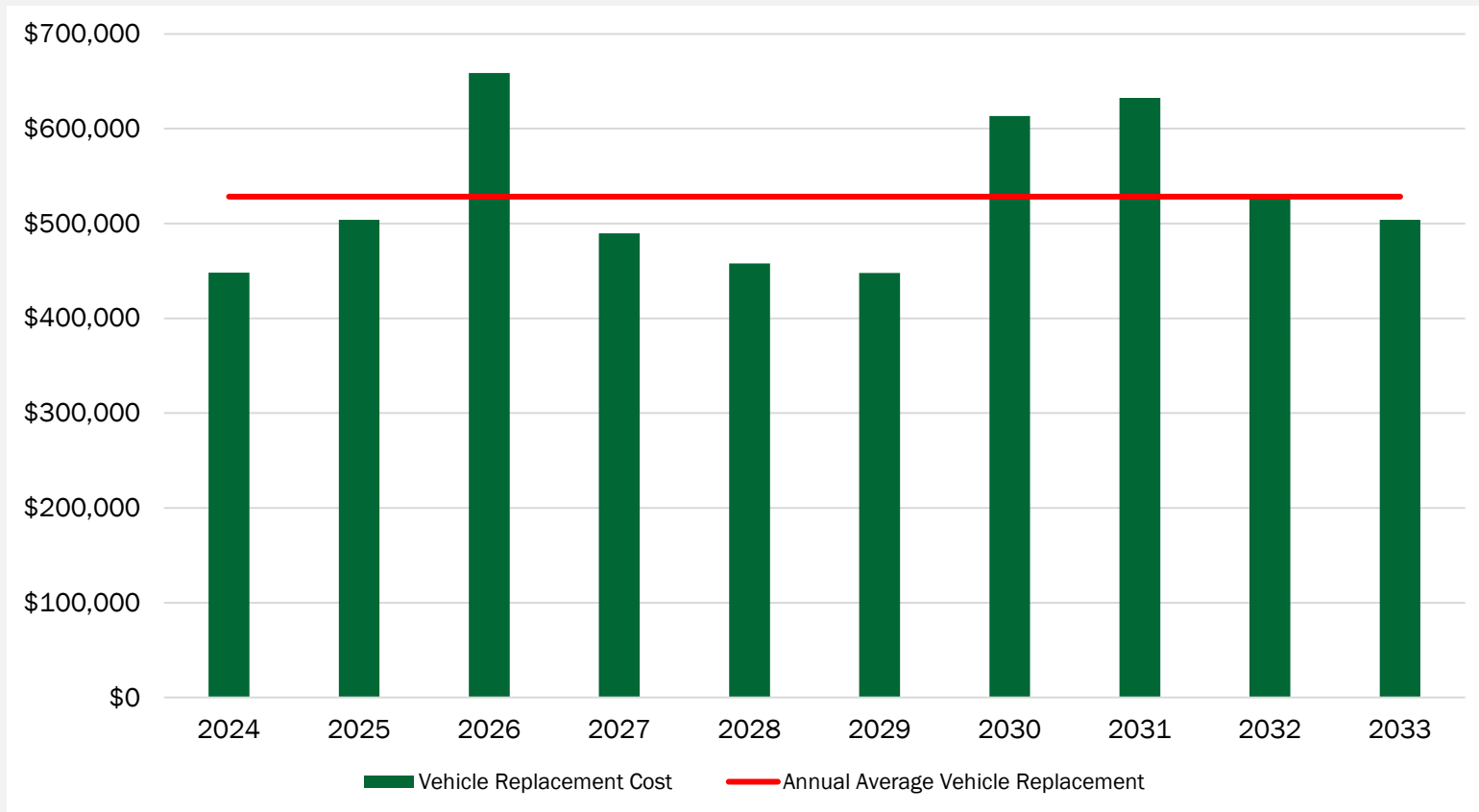
	Actual 2021	Actual 2022	Actual 2023	Budgeted 2024
Revenue	\$3,063,058	\$3,108,061	\$5,384,180*	\$3,291,200
Expenses**	\$3,914,540	\$4,101,817	\$4,081,844	\$3,656,887
Surplus(Deficit)	(\$851,482)	(\$993,756)	\$1,302,336	(\$365,687)

**Includes a \$2,278,261 Transfer In*

***2021-2023 included \$400-\$500,000/year Leaf Collection, 2024 does not*

Vehicle/Equipment Replacement

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Estimated current replacement value = \$5.3 million

Aged Fleet and Equipment

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Type	Typical Life Expectancy	Daily Use Vehicles	Avg. Age of Daily Use Units	Spares
Automated Sideloader (Carts)	8	5	6.4	2
Automated Sideloader (Dumpsters)	8	3	14.0	1
Roll Off Truck	10	1	9.0	
Transfer Trailers	15	3	14.7	
Road Tractors	12	2	12.5	1
Rear Loader	9	4	14.0	

Capital Improvement Project/Plan (CIP)

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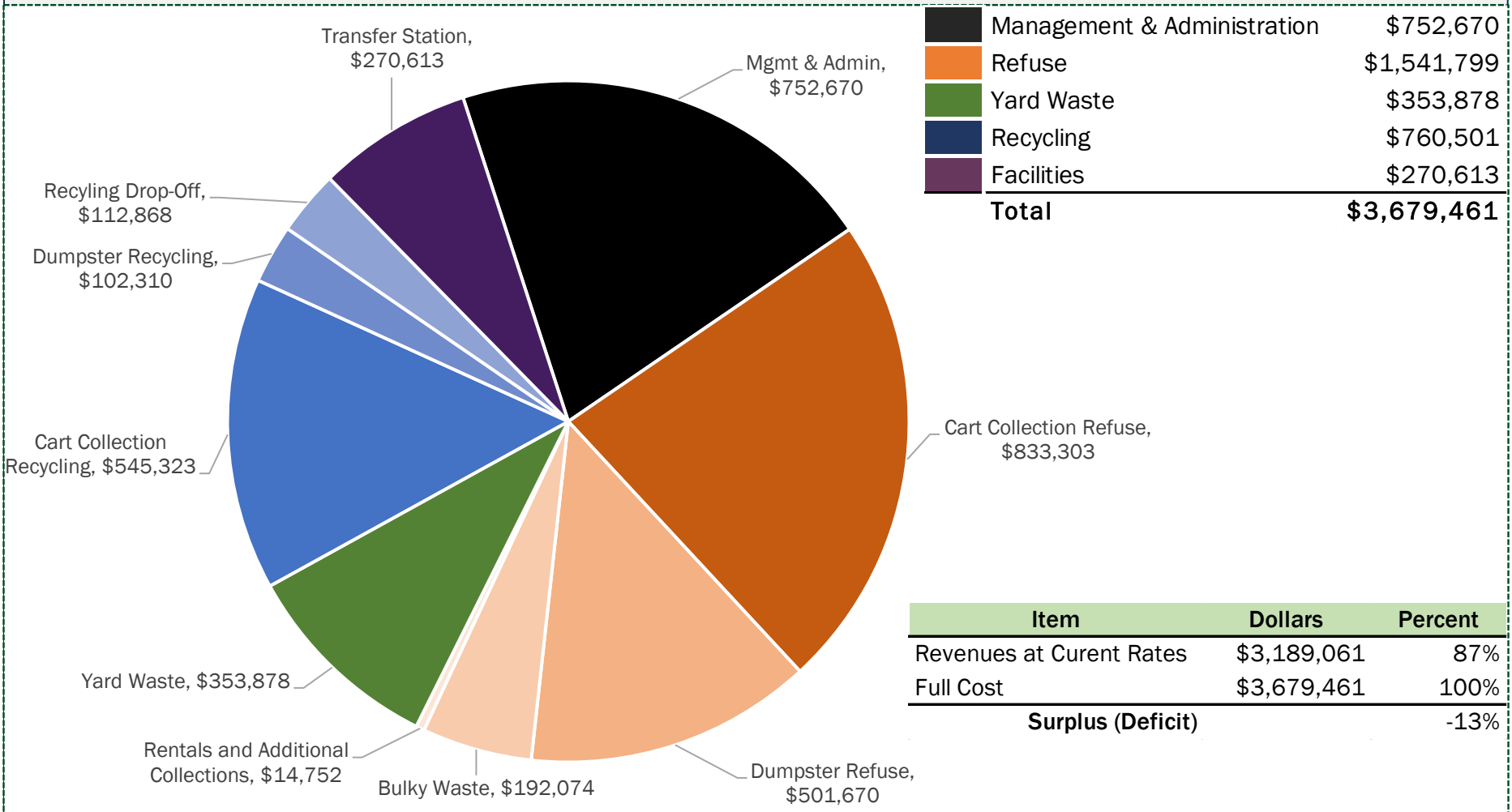
Item	Cost	Year
Transfer Station Compactor-Replacement	\$275,000	2025

Including 3% CPI per year, this is a 10-Year Average Rate Impact = \$29,175

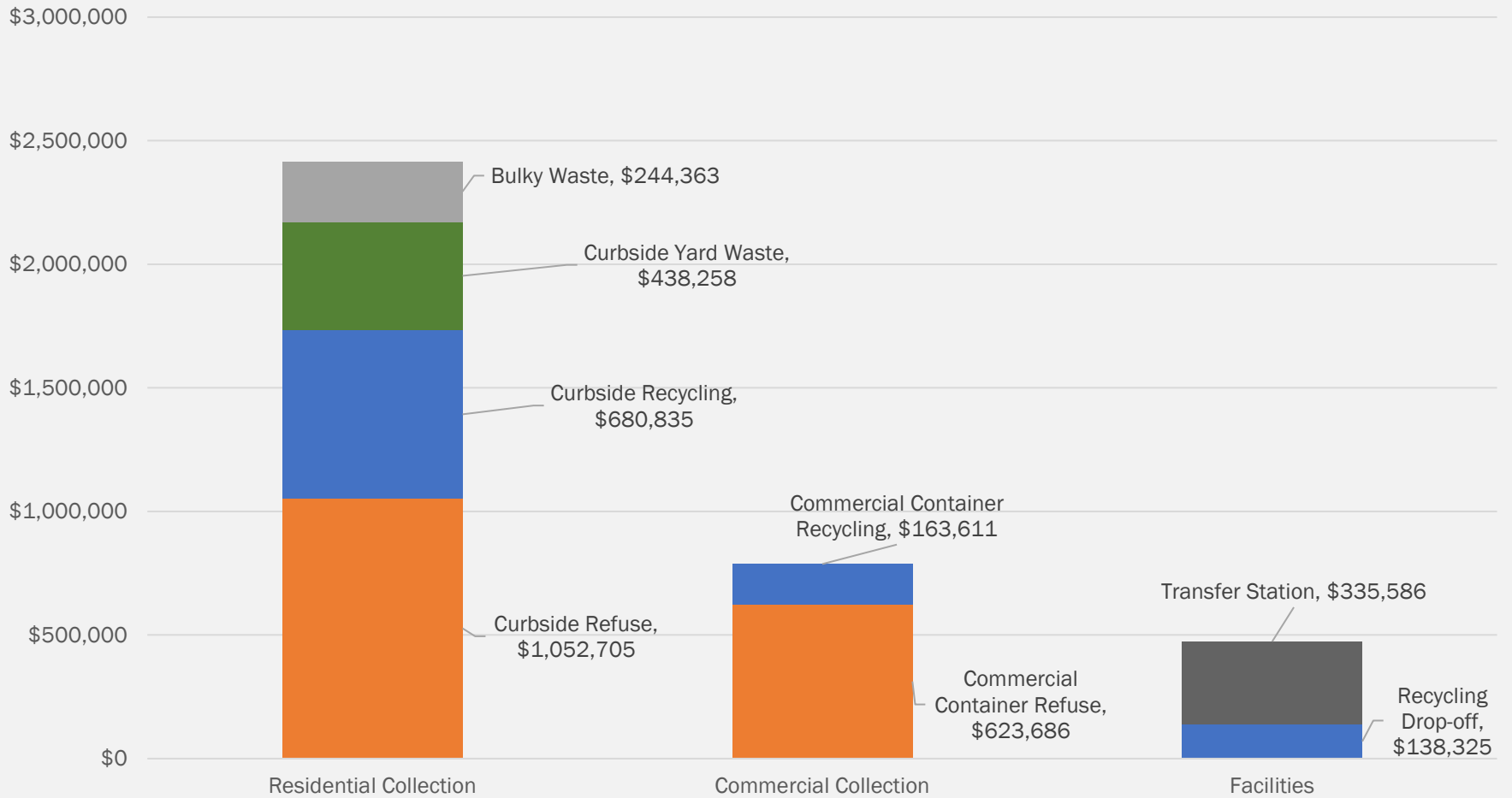
Cash outlay is in Year 1

Test Year Full Cost

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Allocated Full Costs by Service Sector



MSW format 2024 Full Cost

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Cost Center	Annual Revenue Need	Adjusted Annual Revenue Need
Mgmt & Admin	\$752,670	
Collection	\$2,543,310	\$3,537,421
Cart Collection Refuse	\$819,636	\$1,264,461
Cart Collection Recycling	\$533,071	\$686,271
Yard Waste	\$353,878	\$445,345
Bulky Waste	\$192,074	\$260,222
Dumpster Refuse	\$501,075	\$733,935
Dumpster Recycling	\$102,254	\$128,754
Container Maintenance	\$26,569	\$0
Rentals and Additional Collections	\$14,752	\$18,433
Facilities	\$383,481	\$142,041
Transfer Station	\$270,613	\$0
Recycling Drop-Off	\$112,868	\$142,041
Total	\$3,679,461	\$3,679,461

Tonnage Overview

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Material	Destination Facility	Tons	Disposal Cost/Ton	Disposal Cost
Residential Refuse	City Transfer Station then Champ LF	7,978	\$60.17	\$480,036
Commercial Refuse	City Transfer Station then Champ LF	3,785	\$60.17	\$227,743
Residential Recycling	Republic Services MRF	1,743	\$111.00**	\$193,516
Commercial Recycling	Republic Services MRF	402	\$111.00**	\$44,622
Yard Waste	City Park then St. Louis Composting	1,448*	\$40.06	\$67,000
Bulk Waste	City Transfer Station then Champ LF	684	\$60.17	\$41,162
Subtotal		16,040		\$1,054,080
<i>Transfer Station</i>		<i>12,447</i>	<i>\$26.83</i>	<i>\$334,003</i>
Total				\$1,388,083

*Tons estimated based on volume

**Average Net per Ton recent 6 months

Full Cost Rate (Residential) Building blocks

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Service	Full Cost (Monthly) Per HH/Unit	Full Cost 2/year Rate Per HH/Unit
Refuse 60-Gal Cart, 1x/week	\$8.36	\$50.16
Refuse 90-Gal Cart, 1x/week	\$9.79	\$58.75
Recycling Cart, 1x/week	\$3.45	\$20.70
Alley and 3+ Unit Dumpster Refuse, 2x/week	\$15.34	\$92.01
3+ Unit Dumpster Recycling, 2x/week	\$2.35	\$14.12
Yard Waste (collection cost to pass by weekly)	\$2.17	\$13.02
Bulk Waste	\$1.26	\$7.56
Recycling Drop-off	\$0.69	\$4.14

Residential Full Cost Rates

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Residential Collection	2024 Billing Units	Current Rates		Full Cost Rates		Percent Change
		Monthly Rate	2x/Yr Billing Rate	Monthly Rate	2x/Yr Billing Rate	
Single 90 Gal Refuse & Recycling 1x/wk	8,384	\$18.35	\$110.10	\$19.09	\$114.55	4.0%
Two Family 90 Gal Refuse & Recycling 1x/wk	8	\$21.05	\$126.30	\$19.09	\$114.55	-9.3%
Single & Two Family 60 Gal Refuse & Recycling-Senior	1,396	\$15.55	\$93.30	\$17.66	\$105.96	13.6%
Single 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart	829	\$19.74	\$118.44	\$23.82	\$142.89	20.6%
Two Family 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart	7	\$22.64	\$135.84	\$23.82	\$142.89	5.2%
Single 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart-Senior	125	\$17.09	\$102.54	\$23.82	\$142.89	39.4%
3+ Units - Alley Mechanical Dumpsters 2x/wk - Refuse & Recycling	2,701	\$13.10	\$78.60	\$21.36	\$128.15	38.7%
3+ Units - 90 Gal Refuse & Recycling 1x/wk	1,051	\$21.05	\$126.30	\$19.09	\$114.55	-10.3%

Commercial Refuse 6-Month Rates

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Current Rates

Size	Frequency					
	1	2	3	4	5	6
2	\$408	\$571	N/A	N/A	N/A	N/A
3	\$442	\$618	N/A	N/A	N/A	N/A
4	\$478	\$670	\$937	\$1,312	\$1,837	\$2,572
Annual Revenue					\$54,585	

Full Cost Rates

Size	Frequency					
	1	2	3	4	5	6
2	\$342	\$685	N/A	N/A	N/A	N/A
3	\$390	\$780	N/A	N/A	N/A	N/A
4	\$438	\$876	\$1,314	\$1,752	\$2,190	\$2,628
Annual Revenue Need					\$64,080	

Commercial Recycling 6-Month Rates

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Currently No Rates Charged

Full Cost Rates

Size	Frequency					
	1	2	3	4	5	6
2	\$580	\$1,160	\$1,740	\$2,319	\$2,899	\$3,479
3	\$651	\$1,302	\$1,953	\$2,603	\$3,254	\$3,905
4	\$722	\$1,444	\$2,166	\$2,887	\$3,609	\$4,331
Annual Revenue Need						\$47,950

Cost of Service Findings

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- Total allocated full cost is up from \$3,466,090 (with Leaf Collection in 2018) to \$3,679,461 (without Leaf Collection)
- Residential collection, whether from curbside or dumpster, is the predominant service line from which to recover revenue.
- Commercial garbage rates are out of balance (varying revenue shortage based on size and frequency).
- Commercial recycling has historically been fully subsidized by commercial garbage collection or other budgetary transfers.
- Roll-off has a very small customer base, flat rate includes placement and one service. Reported tonnage indicates 4.8 tons per service and the minimally used service is a money loser.

Rate Design

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Residential Rates

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- **One- and Two-Family Collections**

- Current Two-Family rates are higher than One-Family rates. Recommending these be the same since each family receives the same services and each account is billed for two families.
- Proposed Rate Path
 - ✦ 8.5% increase in year 1 with the exception of equilibrating the two-family rate charged per family to be the same per family as the one-family rate

Residential Rates cont.

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- **3+ unit Multi-family mechanical dumpsters**
 - Deficit: 63% for the 2x/week collection
 - Proposed Rate Path
 - ✦ 40% increase per unit is still less than the full cost and less than all one- and two-family rates (except senior rates)
- **3+ unit Multi-family 90-Gal cart**
 - Cost is similar to the curbside cart customers, though reasonably would be somewhat less since emptying multiple carts at the same stop (exact numbers per account not available for review)
 - Proposed Rate Path
 - ✦ Align with the one- and two-family rate (slight reduction in current rate)

Recommended Residential Rate Path

Residential Collection	Current Rates		Proposed Rates		Percent Change
	Monthly Rate	2x/Yr Billing Rate	Monthly Rate	2x/Yr Billing Rate	
Single 90 Gal Refuse & Recycling 1x/wk	\$18.35	\$110.10	\$19.91	\$119.46	8.5%
Two Family 90 Gal Refuse & Recycling 1x/wk	\$21.05	\$126.30	\$19.91	\$119.46	-5.4%
Single & Two Family 60 Gal Refuse & Recycling - Senior	\$15.55	\$93.30	\$16.87	\$101.23	8.5%
Single 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart	\$19.74	\$118.44	\$21.42	\$128.51	8.5%
Two Family 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart	\$22.64	\$135.84	\$21.42	\$128.51	-5.4%
Single 2x/wk Alley Dumpster Refuse & 1x/wk Recycling Cart - Senior	\$17.09	\$102.54	\$18.54	\$111.26	8.5%
3+ Units - Alley Mechanical Dumpsters 2x/wk - Refuse & Recycling	\$13.10	\$78.60	\$18.34	\$110.04	40.0%
3+ Units - 90 Gal Refuse & Recycling 1x/wk	\$21.05	\$126.30	\$19.91	\$119.46	-5.4%

Note: 3% CPI escalations are recommended in year 3 and 4 and CPI escalations require an ordinance change

Other Residential Rate Considerations

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- **Drop-off Recycling at the Transfer Station is recovered through all residential rates**
- **Yard Waste sticker program**
 - Cost of running collection truck through all neighborhoods has been incorporated into the full cost of all residential collection services
 - Disposal cost is recovered through the Sticker sales. Recommend a 6.7% increase to \$1.60 per sticker
- **CPI escalation in years 3 and 4 would be required in addition to the proposed rate increases to maintain the reserve requirement during the a 5-year Cash Flow**

Residential Rates – Benchmarked Communities

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Rate Structure	University City (Public)	Kirkwood (Public)	Saint Peters (Public)	Ballwin (Contract)	Clayton (Contract)	Brentwood (Public)	Florissant (Contract)
2018 Rates	\$110.10 (\$18.35/mo.)	\$20.50	\$24.25	\$21.66	\$27.07	"Offered at no charge to residents"	\$15.50
Single Family Trash Pickup Rate Structure: Price of first cart/can/bag	\$110.10 (\$18.35/mo.)	\$27.23	\$26.16 +\$30 Activation Fee	\$21.66	\$53.19	"Offered at no charge to residents"	\$16.45
Frequency Billed	Every 6 Months	Monthly	Every 2 Months	Every 3 Months	Monthly	N/A - Included in Taxes	Monthly

Commercial Rate Considerations

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- **60 commercial refuse accounts, 14 commercial recycling dumpsters**
 - Refuse rates are 17.4% deficient overall, and imbalanced rate structure depending on size, service frequency and number of dumpsters per account
 - Recycling service has historically been provided for “free” due to material markets offsetting processing charges. Since market challenges in 2018, processing charges have not offset costs. Recently cost averaging \$111/ton.

- **Options**
 - Continue service and increase rates
 - ✦ Proposed 10%-68% refuse dumpster increase, varying depending on size, frequency and number of dumpsters
 - ✦ Establish commercial recycling rates at 80% of refuse rate
 - ✦ In addition to Year 1 rate increases, 3% CPI increase in year 3 and 4
 - Privatize commercial sanitation collection
 - Continue subsidizing

Roll-off Rate Considerations

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- **30 roll-off services reported in most recent year**
 - Roll-off truck primarily supports the Recycling Drop-off
 - Operator supports various collection services
 - Reported tonnage indicates an average of 4.8 tons/pull

Roll-off Collection	Current Rate	Full Cost Rate	Proposed Rate	% Different
Refuse 30 CY Roll-Off (10 Business Day Drop and Pull)	\$300.00	\$327.36	\$330.00	10.0%
Refuse 30 CY Roll-Off (Disposal Charge) per Ton	N/A	\$60.17	\$60.17	
<i>Rate if not charging disposal per Ton, avg. 4.8 tons/pull</i>		\$616.18		

- **Recommend recovering costs by rates or do not offer roll-off service**

Summary

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- **Solid waste services are critical for maintaining a healthy standard of living.**
- **Rising costs of labor, equipment & fuel the past few years result in full costs being more than current rate revenue.**
- **Rate increases are required to maintain the financial health of the enterprise for the future.**

Thank you

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